	Application No.	Applicant(s)
Notice of Allowability	10/044,161	AZAGURY ET AL.
	Examiner	Art Unit	
	Neveen Abel-Jalil	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _April 11, 2005_.

2. ☒ The allowed claim(s) is/are _1-69_.

3. ☒ The drawings filed on _January 7, 2002_ are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some*   c)☐ None of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a)☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1)☐ hereto or 2)☐ to Paper No./Mail Date _____ .

    (b)☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

CHARLES RONES
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

Remarks

1.   In response to the Amendment field on April 11, 2005, claims 23-32 and 56-65

have been cancelled. Therefore, claims 1-22, 33-55, and 66-89 are now pending.

2.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided by

37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Mr. Sheridan Neimark (Attorney of Record) on April 29, 2005.

3.   The application has been amended as follows:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listings of Claims:

Claim 1 (Currently Amended): A method for deploying a computer application on a

network for execution by at least one of a plurality of machines that are connected to said

network by at least one of a, comprising the steps of:

installing an application on a local file system of exactly one of said machines;

identifying functionally read only files and read-write files of said application;

moving said functionally read only files from said local file system of said one

machine to a server of a shared file system that is accessible to said machine via said

network to define relocated files;

copying said read-write files to local file systems of <u>remaining</u> others of said

machines; and

establishing symbolic links on said relocated files, on said machine.

Claim 2 (Previously Presented): The method according to claim 1, wherein said step of

relocating said locally installed application further comprises the steps of:

identifying instance read/write files of said application; and

establishing said instance read/write files in at least one subtree of said local file

systems.

Claim 3 (Previously Presented): The method according to claim 1, further comprising the

steps of:

initializing a cache in said server; and

executing a configuration script following performance of said steps of installing

an application.

Claim 4 (Currently Amended): A method for deploying a computer application on a

network, comprising the steps of:

installing an application on a local file system of a server to define a locally

installed application; and

relocating said locally installed application onto a shared file system by the steps

of:

identifying shareable files among files of said application, said sharable files

being shareable among multiple instances of said application;

moving said shareable files from said locally installed application to said shared

file system to define relocated files; and

establishing symbolic links on said server that are directed to corresponding

locations of said relocated files;

wherein said step of relocating said locally installed application further comprises

associating at least one application file element with a 4-tuple, wherein:

a first value of said 4-tuple specifies a root directory in said shared file system;

a second value of said 4-tuple specifies a first subdirectory in said local file

system;

a third value ~~policy~~ of said 4-tuple specifies a file creation policy that applies to

said local file system; and

a fourth value is a reference to a configuration script.

Claim 5 (previously presented): The method according to claim 4, wherein said third

value specifies a step of creating said first subdirectory in said local file system.

Claim 6 (previously presented): The method according to claim 4, wherein said file

creation policy specifies a step of creating a first symbolic link in said local file system to

a remote file.

Claim 7 (previously presented): The method according to claim 4, wherein said file

creation policy specifies creating in said local file system a first symbolic link to a remote

subdirectory and a second symbolic link to a remote file.

Claim 8 (previously presented): The method according to claim 4, further comprising the

step of modifying at least one of said files of said application by executing said

configuration script.

Claim 9 (previously presented): The method according to claim 4, wherein said step of

relocating said locally installed application is performed by: in a first event that said file

creation policy specifies the step of creating one of said symbolic links.

Claim 10 (previously presented): The method according to claim 4, wherein said step of

relocating said locally installed application further comprises the step of: in a second

event that said file creation policy specifies an exclusive creation of subdirectories,

creating said first subdirectory in said local file system.

Claim 11 (previously presented): The method according to claim 10, wherein said step of

creating said first subdirectory comprises adding said first subdirectory to a set of

subdirectories to be created.

Claim 12 (previously presented): The method according to claim 4, wherein said

application file element comprises said root directory.

Claim 13 (previously presented): The method according to claim 12, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

Claim 14 (previously presented): The method according to claim 13, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

Claim 15 (previously presented): The method according to claim 13, wherein at least a portion of said application file elements of said root directory are substituted for said first value and said second value of said 4-tuple.

Claim 16 (previously presented): The method according to claim 4, further comprising the step of executing said configuration script.

Claim 17 (previously presented): The method according to claim 4, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links; and

in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

Claim 18 (previously presented): The method according to claim 17, wherein said step of creating said subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

Claim 19 (previously presented): The method according to claim 17, wherein said application file element comprises said root directory.

Claim 20 (previously presented): The method according to claim 19, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

Claim 21 (previously presented): The method according to claim 20, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

Claim 22 (previously presented): The method according to claim 20, wherein at least a portion of said application file elements of said root directory are substituted for said first value and said second value of said 4-tuple.

Claims 23-32 (Cancelled)

Claim 33 (Currently Amended): A computer software product, comprising a computer-readable medium in which computer program instructions are stored, wherein said instructions, when read by a computer, cause the computer to deploy an application on a network for execution by at least one of a plurality of machines that are connected to said network, by executing the steps of:

   installing an application on a local file system of exactly one of said machines;

   identifying functionally read only files and read-write files of said application;

   moving said functionally read only files from said local file system of said one machine to a server of a shared file system that is accessible to said machine via said network to define relocated files;

   copying said read-write files to local file systems of <u>remaining</u> others of said machines; and

   establishing symbolic links on said relocated files, on said machine.

Claim 34 (Previously Presented): The computer software product according to claim 33, wherein said computer is further instructed to perform the steps of:

   identifying instance read/write files of said application; and

   establishing said instance read/write files in at least one subtree of said local file systems.

Claim 35 (Previously Presented): The computer software product according to claim 33, wherein said computer is further instructed to perform the step of executing a configuration script following performance of said step of installing an application.

Claim 36 (Currently Amended): A computer software product, comprising a computer-readable medium in which computer program instructions are stored, wherein said instructions, when read by a computer, cause the computer to deploy an application on a network by executing the steps of:

installing an application on a local file system of a server to define a locally installed application; and

relocating said locally installed application onto a shared file system by the steps of:

identifying shareable files among files of said application, said sharable files being shareable among multiple instances of said application;

moving said shareable files from said locally installed application to said shared file system to define relocated files; and

establishing symbolic links on said server that are directed to corresponding locations of said relocated files;

wherein said step of relocating said locally installed application further comprises associating at least one application file element with a 4-tuple, wherein:

a first value of said 4-tuple specifies a root directory in said shared file system;

a second value of said 4-tuple specifies a first subdirectory in said local file system;

a third value of said 4-tuple specifies a file creation policy that applies to said local file system; and

a fourth value is an optional reference to a configuration script.

Claim 37 (Previously Presented): The computer software product according to claim 36, wherein said file creation policy specifies a step of creating said first subdirectory in said local file system.

Claim 38 (Previously Presented): The computer software product according to claim 36, wherein said file creation policy specifies a step of creating a first symbolic link in said local file system to a remote file.

Claim 39 (Previously Presented): The computer software product according to claim 36, wherein said file creation policy specifies creating in said local file system a first symbolic link to a remote subdirectory and a second symbolic link to a remote file.

Claim 40 (Previously Presented): The computer software product according to claim 36, further comprising the step of modifying at least one of said files of s aid application by executing said configuration script.

Claim 41 (Previously Presented): The computer software product according to claim 36, further comprising the step of modifying at least one system file by executing said configuration script.

Claim 42 (Previously Presented): The computer software product according to claim 36, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links.

Claim 43 (Previously Presented): The computer software product according to claim 36, wherein said step of relocating said locally installed application is performed by: in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

Claim 44 (Previously Presented): The computer software product according to claim 43, wherein said step of creating said first subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

Claim 45 (Previously Presented): The computer software product according to claim 36, wherein said application file element comprises said root directory.

Claim 46 (Previously Presented): The computer software product according to claim 45, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

Claim 47 (Previously Presented): The computer software product according to claim 46, wherein said step of relocating said locally installed application is performed by

recursively mapping a subtree of said local file system onto said shared file system.

Claim 48 (Previously Presented): The computer software product according to claim 46, wherein during said step of relocating said locally installed application at least a portion of said application file elements of said root directory are substituted for said first value and said second value of said 4-tuple.

Claim 49 (Previously Presented): The computer software product according to claim 36, further comprising the step of executing said configuration script.

Claim 50 (Previously Presented): The computer software product according to claim 36, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links; and

in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

Claim 51 (Previously Presented): The computer software product according to claim 50, wherein said step of creating said first subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

Claim 52 (Previously Presented): The computer software product according to claim 50, wherein said application file element comprises said root directory.

Claim 53 (Previously Presented): The computer software product according to claim 52, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

Claim 54 (Previously Presented): The computer software product according to claim 53, wherein said step of relocating said locally installed application is performed by recursively mapping a subtree of said local file system onto said shared file system.

Claim 55 (Previously Presented): The computer software product according to claim 53, wherein at least a portion of said application file elements of said root directory are substituted for said first value and said second value of said 4-tuple.

Claims 56-65 (cancelled)

Claim 66 (Currently Amended): A computer system comprising:

　　　　A computer having a computer program instructions stored therein, wherein said instructions, when read by said computer cause said computer to deploy an application on a network for execution by at least one of a plurality of machines that are connected to said network by at least one of a, comprising the steps of:

　　　　installing an application on a local file system of exactly one of said machines;

　　　　identifying functionally read only files and read-write files of said application;

moving said functionally read only files from said local file system of said one

machine to a server of a shared file system that is accessible to said machine via said

network to define relocated files;

copying said read-write files to local file systems of <u>remaining</u> others of said

machines; and

establishing symbolic links on said relocated files, on said machine.

Claim 67 (Previously Presented): The computer system according to claim 66, wherein

said computer is further instructed to perform the steps of:

identifying instance read/write files of said application; and

establishing said instance read/write files in at least one subtree of said local file

systems.

Claim 68 (Previously Presented): The computer system according to claim 66, wherein

said computer is further instructed to perform the step of executing a configuration script

following performance of said step of installing an application.

Claim 69 (Currently Amended): A computer system comprising:

a computer having computer program instructions are stored therein, wherein said

instructions, when read by a computer, cause the computer to deploy an application on a

network by executing the steps of:

installing an application on a local file system of a server to define a locally

installed application; and

relocating said locally installed application onto a shared file system by the steps

of:

identifying shareable files among files of said application, said sharable files

being shareable among multiple instances of said application;

moving said shareable files from said locally installed application to said shared

file system to define relocated files; and

establishing symbolic links on said server that are directed to corresponding

locations of said relocated files;

wherein said step of relocating said locally installed application further comprises

associating at least one application file element with a 4-tuple, wherein:

a first value of said 4-tuple specifies a root directory in said shared file system;

a second value of said 4-tuple specifies a first subdirectory in said local file

system;

a third value of said 4-tuple specifies a file creation policy that applies to said

local file system; and

a fourth value is an optional reference to a configuration script.

Claim 70 (Previously Presented): The computer system according to claim 69, wherein

said file creation policy specifies a step of creating said first subdirectory in said local file

system.

Claim 71 (Previously Presented): The computer system according to claim 69, wherein

said file creation policy specifies a step of creating a first symbolic link in said local file

system to a remote file.

Claim 72 (Previously Presented): The computer system according to claim 69, wherein said file creation policy specifies creating in said local file system a first symbolic link to a remote subdirectory and a second symbolic link to a remote file.

Claim 73 (Previously Presented): The computer system according to claim 69, wherein said configuration scrip modifies at least one of said files of said application, wherein said files of said application are located on said local file system.

Claim 74 (Previously Presented): The computer system according to claim 69, wherein said configuration script modifies at least one of said files of said application.

Claim 75 (Previously Presented): The computer system according to claim 69, wherein said configuration script modifies at least one system file.

Claim 76 (Previously Presented): The computer system according to claim 69, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links.

Claim 77 (Previously Presented): The computer system according to claim 69, wherein said step of relocating said locally installed application is performed by:

in a second event that said file creation policy specifies exclusive creation of

subdirectories, creating said first subdirectory in said local file system.

Claim 78 (Previously Presented): The computer system according to claim 77, wherein

said step of creating said first subdirectory comprises adding said first subdirectory to a

set of subdirectories to be created.

Claim 79 (Previously Presented): The computer system according to claim 69, wherein

said application file element comprises said root directory.

Claim 80 (Previously Presented): The computer system according to claim 79, wherein

said step of relocating said locally installed application is performed by successively

associating application file elements of said root directory with said 4-tuple.

Claim 81 (Previously Presented): The computer system according to claim 80, wherein

said step of relocating said locally installed application is performed by recursively

mapping a subtree of said local file system onto said shared file system.

Claim 82 (Previously Presented): The computer system according to claim 80, wherein

during said step of relocating said locally installed application at least a portion of said

application file elements of said root directory are substituted for said first value and said

second value of said 4-tuple.

Claim 83 (Previously Presented): The computer system according to claim 69, further comprising the step of executing said configuration script.

Claim 84 (Previously Presented): The computer system according to claim 69, wherein said step of relocating said locally installed application is performed by:

in a first event that said file creation policy specifies creation of said symbolic links, creating one of said symbolic links; and

in a second event that said file creation policy specifies exclusive creation of subdirectories, creating said first subdirectory in said local file system.

Claim 85 (Previously Presented): The computer system according to claim 84, wherein said step of creating said first subdirectory comprises adding said first subdirectory to a set of subdirectories to be created.

Claim 86 (Previously Presented): The computer software product according to claim 84, wherein said application file element comprises said root directory.

Claim 87 (Previously Presented): The computer software product according to claim 86, wherein said step of relocating said locally installed application is performed by successively associating application file elements of said root directory with said 4-tuple.

Claim 88 (Previously Presented): The computer software product according to claim 87, wherein said step of relocating said locally installed application is performed by

recursively mapping a subtree of said local file system onto said shared file system.

Claim 89 (Previously Presented): The computer software product according to claim 87, wherein at least a portion of said application file elements of said root directory are substituted for said first value and said second value of said 4-tuple.

Reasons for Allowance

4. Claims 1-22, 33-55, and 66-89 are allowed over the prior art made of record.

5. The following is a statement of reasons for allowance:

The prior art of record (Lucas et al. -U.S. Patent No. 6,725,453 B1-and- Pisello et al. -U.S. Patent No. 5,678,042) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), identifying functionally read only files and read-write files of said application; moving said functionally read only files from said local file system of said one machine to a server of a shared file system that is accessible to said machine via said network to define relocated files, as claimed in claims 1, 33, and 66.

Claims 2-3, 34-35, and 67-68 are allowed over the prior art made of record, because they are dependent from the allowed independent claims 1, 33, and 66, respectively.

The prior art of record (<u>Lucas et al.</u> -U.S. Patent No. 6,725,453 B1-and- <u>Pisello et al.</u> -U.S. Patent No. 5,678,042) do not disclose, teach, or suggest the claimed limitations of (<u>in combination with all other features in the claim</u>), first value of said 4-tuple specifies a root directory in said shared file system; a second value of said 4-tuple specifies a first subdirectory in said local file system; a third value of said 4-tuple specifies a file creation policy that applies to said local file system; and a fourth value script is a reference to a configuration script, as claimed in claims 4, 36, and 69.

Claims 5-22, 37-55, and 70-89 are allowed over the prior art made of record, because they are dependent from the allowed independent claims 4, 36, and 69, respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dov Popovici can be reached on 571-272-4038. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Neveen Abel-Jalil
April 30, 2005

C. Rones
CHARLES RONES
PRIMARY EXAMINER